

VELITEX PROTECTION ENSILAGE

TECHNOLOGIE ISSUE DE LA CONSERVATION DES ALIMENTS

Présentation Technique

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SYSTEME VELITEX ENSILAGE

EN RESUME :

1 Un film imperméable fin (45 microns)

- ✓réduit fortement l'entrée de l'oxygène à l'intérieur de l'ensilage
- ✓Diminue fortement les pertes visibles et invisibles (Butyriques , ect..)

2 SILOSAT 200 gr/m²

- ✓Protège le film d'ensilage contre contaminations extérieures (oiseaux...)
- ✓Renforce la protection aux U.V

3 SILOBAGS (Sacs à silo) Imprimable

- ✓Assure l' étanchéité du silo
- ✓Sacs remplis de graviers en remplacement de pneus pour maintenir fermement le SILOSAT et B.R SILOSTOP contre le vent.



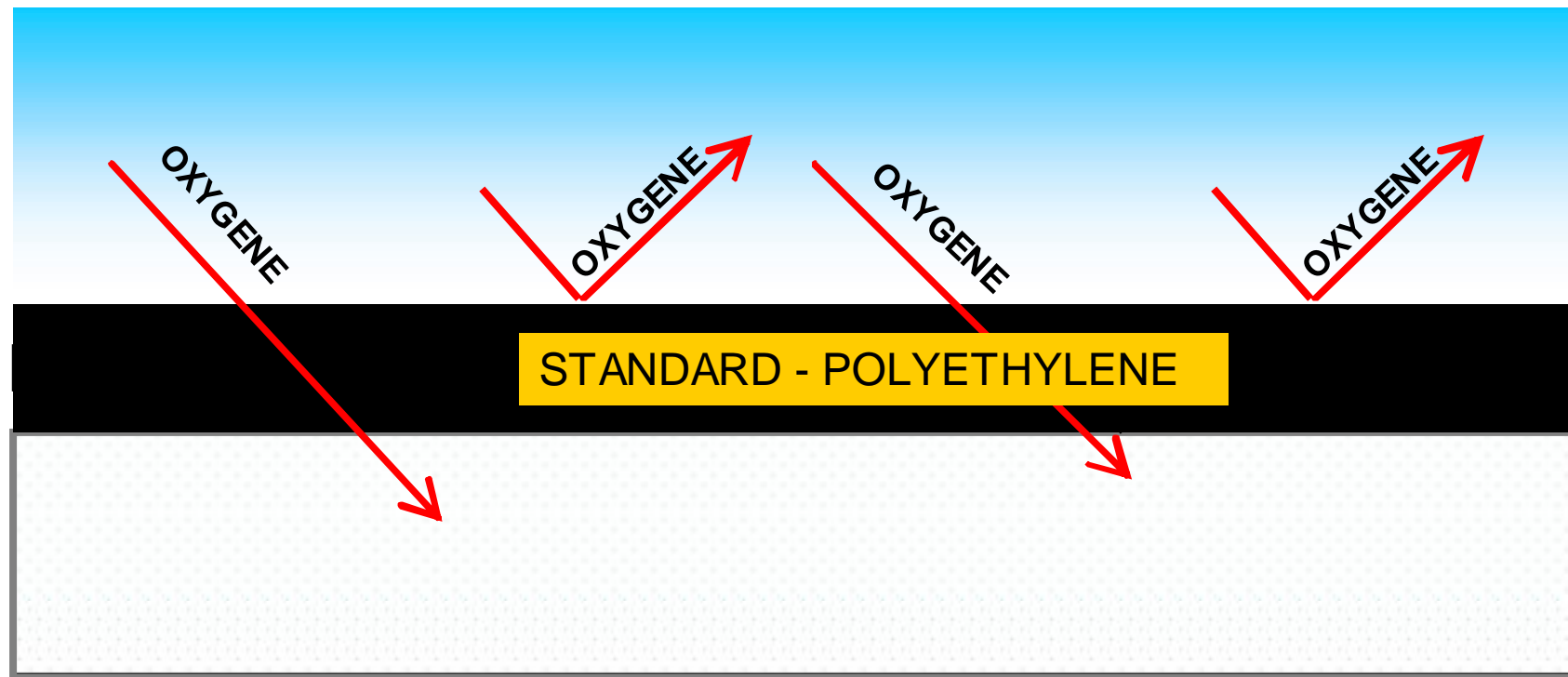
Pour une qualité et une rentabilité assurée

- **Pour le distributeur:**
 - ✓ **Innovation majeure** pour renouveler le conseil sur l' ensilage.
 - ✓ Un système permettant **le diagnostic** à tout moment et endroit périphérique du silo
 - ✓ 3 x plus léger : **Plus facile à transporter , une logistique optimisée** avec conditionnement adapté permettant **moins de coût de transport.**
 - ✓ 3 x moins de plastique à recycler : **Écologique et économique**
- **Pour l'utilisateur:**
 - ✓ Très bonne protection du silo: **Sécurité et qualité (Moins de risque butyrique)**
 - ✓ Possède un produit plus propre pour l'environnement: **Écologique**
 - ✓ SILOSAT et SILOBAGS sont réutilisables : **Écologique et économique**
 - ✓ Facile et rapide à mettre en place : **Pratique (Léger) et**
 - ✓ **Très rentable (Moins de pertes de qualité d'ensilage et de temps)**

Effet de l'oxygène sur film ensilage standard

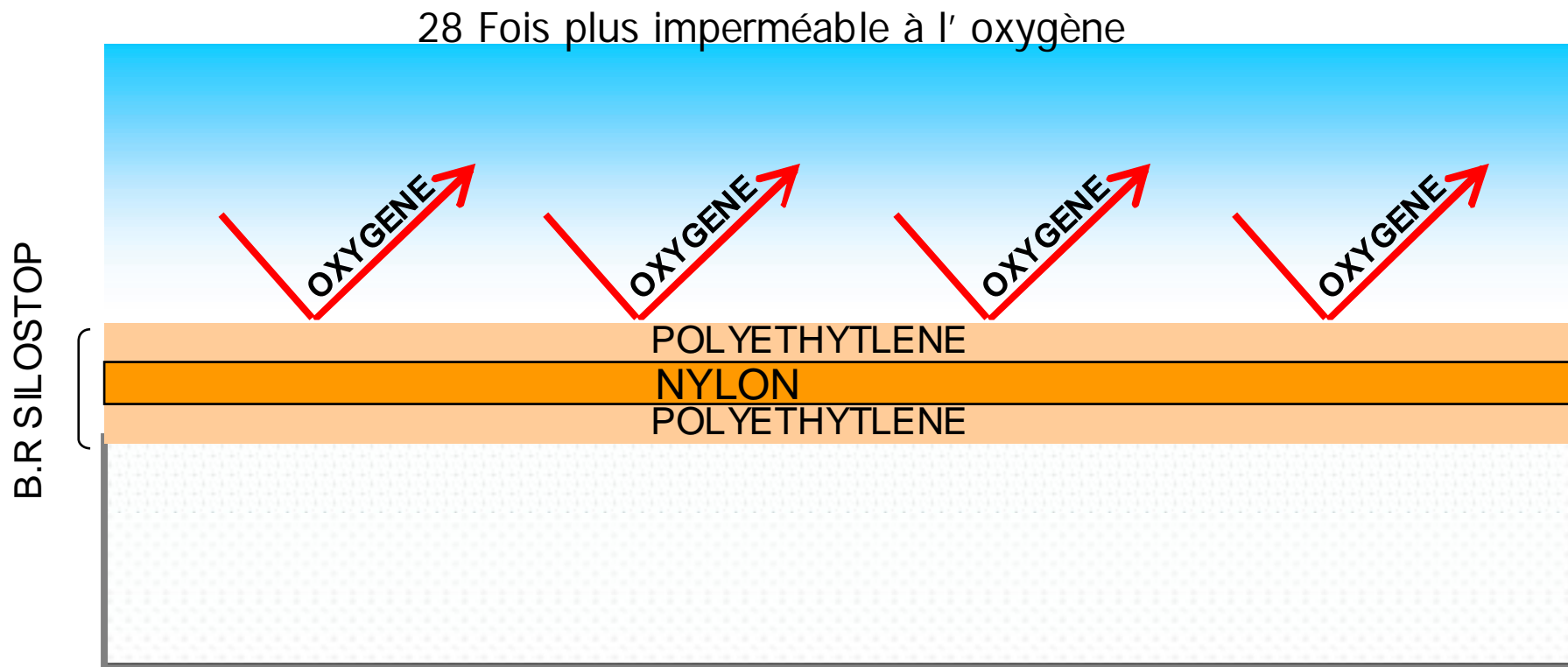
L'entrée d'oxygène est réduite mais pas stoppée 1811 Cm³/M²/24H

Source Dr Wilkinson – Bolsen



Effet de l'oxygène sur film ensilage B.R Silostop

Une barrière oxygène entre deux couche de polyéthylène – 65
CM3/M2/24H



Pourquoi choisir VELITEX ENSILAGE ?

Les films d'ensilage standard laissent passer une quantité plus ou moins importante d'Oxygène dans le tas, d'où une augmentation des pertes d'ensilage.



(testé par l'université du Michigan, EU)

TEST	Silostop	Bâche standard
Epaisseur (µm)	45	125
Perméabilité O ₂ (cm ³ / m ² / 24h)	65	1811



SILOSAT

Protection de silo



INFORMATIONS TECHNIQUES

Description: Protection tissée

Poids : 200 g/m²

Fils: RAFIA de Polypropylène
Résistance : 195 daN/5 cm soit 3,8 T/m

Garantie : 5 ans ou 10 saisons minimum
aux UV Europe

Couleur: Vert foncé

Dimensions standard

5,20 m: 8 ; 9 ; 10 ; 12 , 14 Mt

Bénéfices du SILOSAT

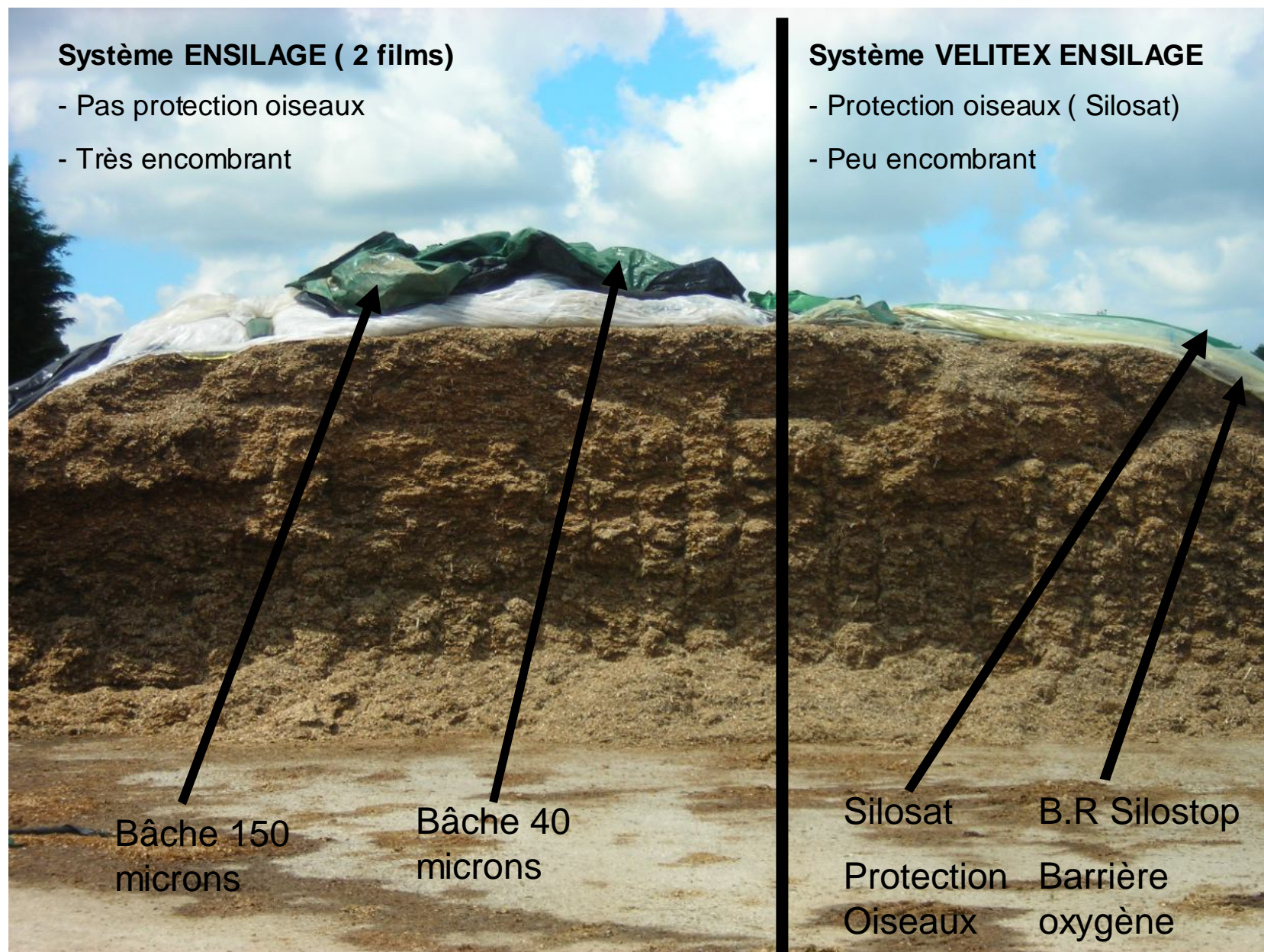
- **Renforce la protection UV** du B.R Silostop
- **Durable** (5 à 10 ans)
- Protection contre les chiens , chats , oiseaux
- **Souple, léger** (8,3Kg), très facile à mettre en place (petit taille) et stocker.
- Peu de boudins de lestage à disposer
- **Manipulation moins pénible** lors de l' avancement dans le silo.

BENEFICES VELITEX ENSILAGE

- 28 fois plus performant qu' une bâche traditionnelle.
- Film fin adhérent au fourrage (sous vide) permettant l' herméticité à l' air. Ce film de vient se placer au contact de l'ensilage en éliminant les poches d'air résiduelles par adhérence sur le tas d'ensilage favorisant ainsi la conservation.
 - Une bâche classique ne peut se comporter ainsi car, avec 150µ, elle est trop rigide.
 - Les poches d'air éliminées, on accroît l'effet barrière anti-oxydante.
 - Le CO² reste emprisonné, les pertes en matière sèche sont minimisées
- Pas de moisissures à éliminer tous les matins.
- Simplicité et rapidité de mise en œuvre .
- Facilite les conseils et diagnostics du silo d' ensilage
- 3 fois moins de plastique à recycler.
- Écologique et respectueux de l' environnement.



○ La qualité de l' ensilage est vérifiable à tout moment

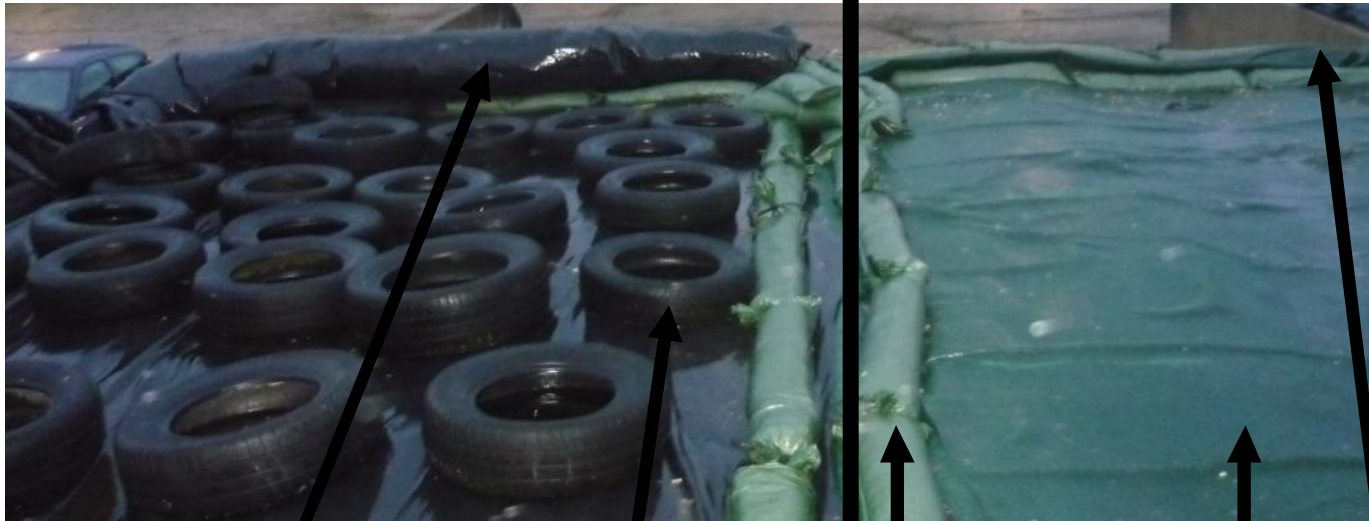


Système ensilage classique (1 bâche)

- Pas protection oiseaux
- Très encombrant ,salissant

Système VELITEX ENSILAGE

- Protection oiseaux (Silosat)
- Peu encombrant, propre



Bâche 150
microns

Pneus

Sacs à silo

SILOSAT
Protection
Oiseaux

B.R Silostop
Barrière
oxygène

PROTECTION VEMITEX ENSILAGE

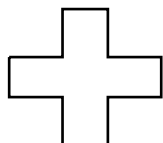
SILOSAT

200 Gr / M2

-Protection Oiseaux,
UV, rongeurs.

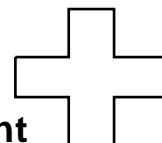
Réutilisable

Facile à disposer



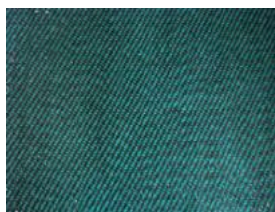
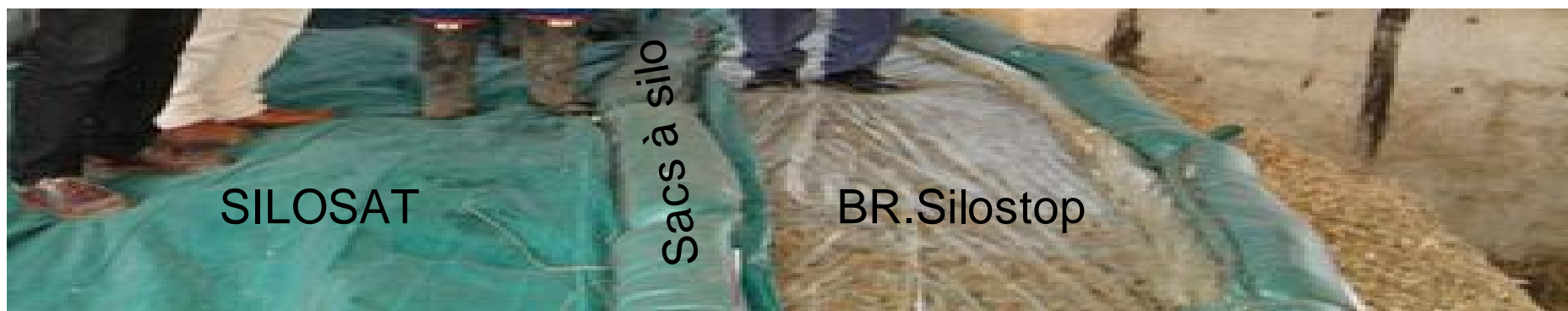
SILOBAGS

-Boudins de lestage assurant
-L' étanchéité à l' oxygène du silo

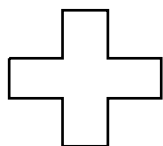


B.R Silostop

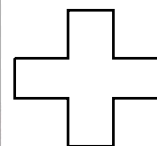
-Film 45 microns limitant
l' oxygène dans l' ensilage



SILOSAT



SILOBAGS



B.R SILOSTOP

UN SYSTEME PERMETTANT DE DEVELOPPER LE CONSEIL , LE DIAGNOSTICS ET LA PRESCRIPTION DES CORRECTEURS DE RATIONS

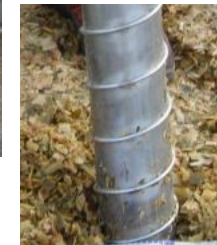
- 1) Le conseil : Organisation de visite chez l'éleveur , journée « Bout de silo »
- 2) Le diagnostic et vérification des avantages du système:
 - Analyses du PH – Température – Activité de l'eau - Densité – Granulométrie.
 - Analyses Nir de l'ensilage (Humidité – Amidon – Protéine – ADF – NDF – Fibres ect..)
 - Prises d'échantillons pour le laboratoire et correction de la ration.

Ce système permet de prendre des échantillons à tout endroit et tout moment sur le silo avec une vue préalable grâce à la transparence du film B.R Silostop.

- 3) Grâce à ces informations il est possible de prévoir les besoins de correcteurs de rations et mieux conseiller les éleveurs.



Journée « Bout de silo »



Analyse proche infrarouge immédiate



Ouverture de visite facile entre les SILOSAT et transparence du B.R Silostop



Journée « Bout de silo »



Diagnostic ensilage

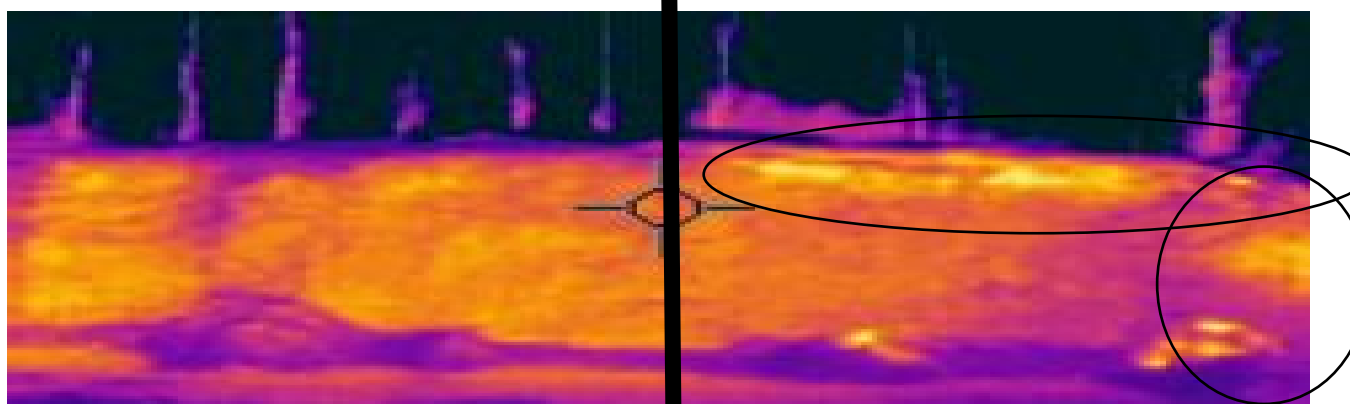


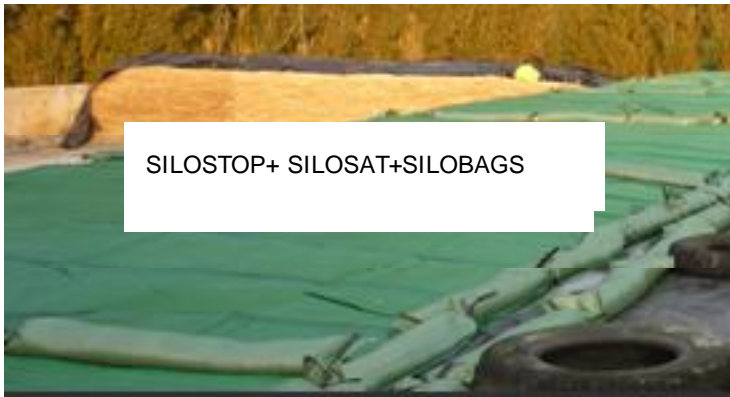
Photo caméra Infrarouge

Froid



Chaud

The color scale bar indicates temperature, with 'Froid' (Cold) on the left and 'Chaud' (Hot) on the right.



SILOSTOP+ SILOSAT+SILOBAGS



TRADITIONNEL

**B.R SILOSTOP Clear
+SILOSAT +
SILOBAGS**



**Bâche 150 Microns
traditionnelle**

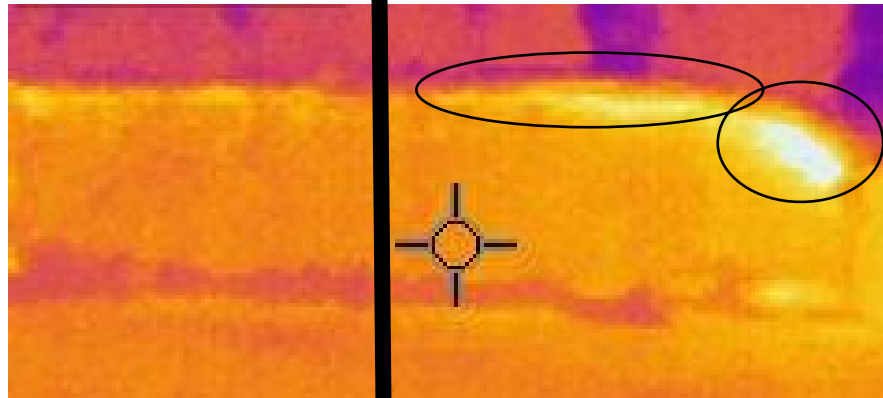


Photo caméra Infrarouge

Froid

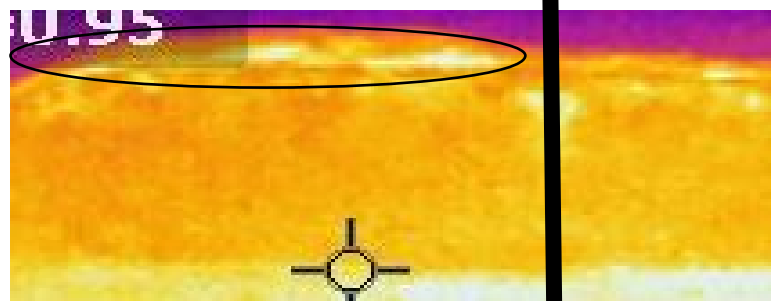


Chaud

Bâche traditionnelle + Film 40 microns

B.R SILOSTOP +SILOSAT+SILOBAGS

Photo caméra Infrarouge



Froid



Chaud

Les publications en diffusion libre

- Résultats sur la prévention des butyriques.
- Résultats sur Maïs ensilage et Maïs humide.
- Résultats sur Ray-grass.
- Résultats présentés lors de la conférence Internationale des ensilages en 2008.

Low Permeability to Oxygen of a New Barrier Film Prevents Butyric Acid Bacteria Spore Formation in Farm Corn Silage

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The outgrowth of *Clostridium* spore-forming bacteria causes late blowing in cheeses. Recently, the role of air diffusion during storage and feed-out and the role of aerobic deterioration has been shown to indirectly favor butyric acid bacteria (BAB) growth and to determine the presence of high concentrations of BAB spores in farm tank milk. A new oxygen barrier (OB) film was tested and compared with conventional polyethylene (ST). The objective was to verify whether the OB film could prevent BAB spore formation in whole-crop corn silage during storage on 2 commercial farms with different potential silage spoilage risks. Two bunkers (farms 1 and 2) were divided into 2 parts along the length so that half the feed-out face would be covered with ST film and the other half with OB film. Plastic net bags with freshly chopped corn were buried in the upper layer and in the central part (CORE) of the bunkers. The silos were opened in summer and fed out at different removal rates (19 vs. 33 cm/d). Herbage at ensiling, silage at unloading, and silage after air exposure (6 and 15 d) were analyzed for pH, nitrate, BAB spores, yeasts, and molds. The BAB spores in herbages at ensiling were $2.84 \log_{10}$ most probable number (MPN)/g, with no differences between treatments or farms. Nitrate was below the detection limit on farm 1 and exceeded 2,300 mg/kg of fresh matter on farm 2. At unloading, the BAB spores in the ST silage on farm 1 were greater than $5 \log_{10}$ MPN/g, whereas in the CORE and the OB silages, they were approximately $2 \log_{10}$ MPN/g. The ST silage had the greatest pH (5.89), the greatest mold count ($5.07 \log_{10}$ cfu/g), and the greatest difference between silage temperature and ambient temperature ($dT_{\text{section-ambient}}$). On farm 2, the ST silage had the greatest concentration of BAB spores ($2.19 \log_{10}$ MPN/g), the greatest pH (4.05), and the least nitrate concentration compared with the CORE and the OB silages. Pooled data on BAB spores collected from aerobically deteriorated samples showed a positive relationship with pH, mold count, and $dT_{\text{section-ambient}}$ and a negative relationship with nitrate concentration. A high concentration of BAB spores ($>5 \log$ MPN/g) was associated with visible spoilage, high pH values (>5.00), high mold counts ($>5 \log$ cfu/g), high $dT_{\text{section-ambient}}$, and nitrate below 1,000 mg/kg of fresh matter. **We concluded that the use of a film with reduced oxygen permeability prevented the outgrowth of BAB spores during conservation and feed-out, and it could improve the microbiological quality of corn silage by eliminating the fractions of silage with high BAB spore concentrations.**

Key Words: butyric acid bacteria • corn silage • oxygen barrier film Silostop • aerobic deterioration

AMELIORATION DE LA QUALITE DE L' ENSILAGE

Résultats B.R Silostop (OB film) sur Maïs ensilage et Maïs humide (HM Corn)

Table 5. Effects of standard film and oxygen barrier film (OB film) on DM loss, visible surface mold, and inedible silage.

Item	Single standard film	Double standard film	Single OB film
DM loss, % of the DM ensiled	14.4	12.5	7.4
Depth of visible surface mold, inches	6.0 ^a	3.7 ^a	<0.1 ^b
Inedible silage, % of the silage DM	20.1 ^a	14.0 ^a	3.5 ^b

^{a,b}Means with different superscripts are differ (P<0.05)

Table 6. Effects of 6-mil black plastic and oxygen barrier (OB) film on pH, fermentation profile, estimated additional spoilage loss of OM, and ash content in corn silage and HM corn at 0 to 18 inches from the surface at 240 days post-filling.

Item	----- Corn silage -----		----- HM corn -----	
	Black plastic	OB film	Black plastic	OB film
DM content, %	29.2	31.6	72.3	73.2
pH	4.28	3.78	4.70	4.09
Estimated OM loss ^{1,2}	27.3	8.4	12.6	7.2
	----- % of the silage DM -----			
Lactic acid	2.7	6.8	0.86	1.08
Acetic acid	2.6	2.2	0.25	0.31
Ash	11.2	9.1	2.10	1.98

¹Values are estimated additional spoilage loss of OM, which were calculated from ash content using the equations described by Dickerson et al. (1992a).

²Ash content of the face samples was 8.4% for the corn silage and 1.85% for HM corn.

AMELIORATION DE LA QUALITE DE L' ENSILAGE

Résultats sur ray-grass – B.R SILOSTOP (TCF)

Effect of triple co-extruded film (TCF) on losses during the ensilage of ryegrass.

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RESULTS

The mean weights of DM at the start and end of the ensiling period, mean percentage loss of DM, depth of visible top surface mould and mean percentage inedible silage are in Table 1. Loss of DM tended to be lower for Single TCF than for single and Double P. There was no visible top surface mould on the silos covered with Single TCF. The percentage of inedible silage was markedly lower for Single TCF than for both Single P and Double P.

	Single P	Double P	Single TCF	s.e.d.
Total DM ensiled (kg)	8.45	8.72	8.82	0.643
Total DM at end of storage period (kg)	7.23 ^a	7.63 ^a	8.17 ^b	0.227
Loss of DM (%)	14.4	12.5	7.37	7.039
Depth of visible top surface mould (cm)	15.3 ^a	9.30 ^a	0.00 ^b	2.345
Inedible silage DM (% total DM)	20.1 ^a	14.0 ^a	3.50 ^b	3.124

Means with different superscripts are different (P<0.05)

CONCLUSIONS

A single layer of TCF can reduce top surface mould and has the potential to reduce total loss of DM during ensilage compared with single or double layers of conventional polyethylene film.



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³⁾ Bruno Rimini Ltd, 305 Ballards Lane, London N12 8NP, United Kingdom, E-mail: simon@brunorimini.net

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INTRODUCTION

From 2001 to 2007 an average of 95.3 million metric tons of whole-plant maize was harvested annually for silage in the USA (United States Department of Agriculture, 2008) and about 83 percent of this silage was in walled bunker silos and unwallled piles. Bunker silos and piles are economically attractive for storing large amounts of ensiled maize, however they have large surface areas, which should be protected from air and water during the entire storage and feedout periods. Standard polyethylene, weighted with discarded full-casing tires or tire sidewalls, has been the most common method used to seal bunkers and piles, but OM losses in the original 0.75 m can exceed 300 g/kg (Berger and Bolsen, 2006).

The use of an oxygen barrier film (Silostop) (www.silostop.com) as an alternative to standard polyethylene for sealing bunker silos and piles was reported at the XII International Silage Conference in 1999 (Degano, 1999). It is well known that the use of different raw materials in the manufacture of plastic film provide a range of gas barrier properties, however until recently these characteristics have not been used in silage production. Degano (1999) stated that the permeability of Silostop film was 0.025 that of standard polyethylene film of the same thickness. Oxygen transmission rate (OTR) through standard polyethylene film using 100% oxygen is 1812 cm³/m²/24 h (American Society for Testing Materials, ASTM D3985), while OTR through Silostop film using 100% oxygen is 65.5 cm³/m²/24 h (ASTM D3985). Thus, the permeability of Silostop film was 0.036 that of the standard polyethylene film.

Wilkinson and Rimini (2002) reported virtually no visible surface mold or spoilage and lower percentage of inedible silage for Silostop film-sealed small-scale silos compared to single and double standard polyethylene film-sealed silos. The two trials presented here compared Silostop film to standard polyethylene film on large silage piles on commercial dairies.



13th ICFC, 2008

Conserved feeds in animal nutrition and new technologies

1 and 2, respectively.

CONCLUSIONS

Silostop film was more effective than standard polyethylene film in preventing the entry of oxygen into the ensiled material during the storage and feedout phases. This effect was observed both at the top locations (higher DM density) and the side locations (lower DM density).

Table 1. Effect of standard polyethylene and Silostop on fermentation, nutritional quality, and estimated mean loss of OM at 0 to 45 cm from the surface at 200 days post-filling

Item	Trial 1		Trial 2	
	Standard	Silostop	Standard	Silostop
DM, g/kg	297	312	252	315
pH	4.46	3.80	4.97	3.84
Estimated OM loss, g/kg ^{1,2}	401.2	318.2	378.2	241.8
	g/kg DM			
NDF	513.3	480.8	557.7	461.3
ADF	320.3	298.0	354.3	288.0
Starch	224	251	153	251
Ash	52.7	45.2	57.7	45.7
Lactic acid	21.0	34.2	13.2	38.7
Acetic acid	32.7	51.6	21.5	26.4

¹Estimated loss of OM, calculated from ash content using the equations reported by Bolsen et al. (1993).

²Ash content of the pre-ensiled forage was 31.0 g/kg of DM in Trial 1; and 35.0 g/kg of DM in Trial 2.

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Table 2. Effect of standard polyethylene and Silostop on fermentation, nutritional quality, and estimated mean loss of OM at 0 to 45 cm from the surface at 200 days post-filling

Item	Trial 1				Trial 2			
	Side		Top		Side		Top	
	Standard	Silostop	Standard	Silostop	Standard	Silostop	Standard	Silostop
DM, g/kg	292	314	301	309	192	318	312	311
pH	4.75	3.83	4.17	3.77	5.65	3.89	4.27	3.78
Est. OM loss, g/kg ^{1,2}	446.3	360.7	360.0	275.7	461.0	253.7	295.3	230.0
	g/kg DM							
NDF	531.3	489.3	495.3	472.3	635.7	457.0	480.0	465.7
ADF	331.0	300.7	309.7	295.3	407.7	284.7	301.0	291.3
Starch	205	250	243	252	71	262	236	240
Ash	57.3	48.0	48.0	42.3	66.3	47.3	49.0	45.0
Lactic acid	16.3	26.0	25.7	42.3	5.7	34.3	20.7	43.0
Acetic acid	40.3	72.4	25.0	30.7	20.4	28.1	22.6	24.4

¹Estimated loss of OM, calculated from ash content using the equations reported by Bolsen et al. (1993).

²Ash content of the pre-ensiled forage was 31.0 g/kg of DM in Trial 1; and 35.0 g/kg of DM in Trial 2.

REFERENCES

- BERGER, L.L., BOLSEN, K.K. (2006): Sealing strategies for bunker silos and drive-over piles. In: *Proceedings Silage for Dairy Farms: Growing, Harvesting, Storing, and Feeding*. NRAES Publ.181. Ithaca, NY.
- BOLSEN, K.K., DICKERSON, J.T., BRENT, B.E., SONON, R.N. DALKE, B. Jr., LIN, C.J., BOYER, J.E. Jr. (1993): Rate and extent of top spoilage in horizontal silos. *J. Dairy Sci.*, 76, pp. 2940-2962.
- DEGANO, L. (1999): Improvement of silage quality by innovative covering system. *Proceedings XII International Silage Conference*, Uppsala, Sweden (Ed. T. Pauly), pp. 296-297.
- UNITED STATES DEPARTMENT OF AGRICULTURE. 2008. *National Agricultural Statistics Service. Corn for silage: 2001-2007*. <http://www.nass.usda.gov/> Accessed 17 April 2008.
- WILKINSON, J.M., RIMINI, R. (2002): Effect of triple co-extruded film on losses during the ensilage of ryegrass. *Proceedings, XIII International Silage Conference, Auchincruive, Scotland* (Ed. L. Gechie and C Thomas), pp. 168-169.

Low Permeability to Oxygen of a New Barrier Film Prevents Butyric Acid Bacteria Spore Formation in Farm Corn Silage

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The outgrowth of *Clostridium* spore-forming bacteria causes late blowing in cheeses. Recently, the role of air diffusion during storage and feed-out and the role of aerobic deterioration has been shown to indirectly favor butyric acid bacteria (BAB) growth and to determine the presence of high concentrations of BAB spores in farm tank milk. A new oxygen barrier (OB) film was tested and compared with conventional polyethylene (ST). The objective was to verify whether the OB film could prevent BAB spore formation in whole-crop corn silage during storage on 2 commercial farms with different potential silage spoilage risks. Two bunkers (farms 1 and 2) were divided into 2 parts along the length so that half the feed-out face would be covered with ST film and the other half with OB film. Plastic net bags with freshly chopped corn were buried in the upper layer and in the central part (CORE) of the bunkers. The silos were opened in summer and fed out at different removal rates (19 vs. 33 cm/d). Herbage at ensiling, silage at unloading, and silage after air exposure (6 and 15 d) were analyzed for pH, nitrate, BAB spores, yeasts, and molds. The BAB spores in herbages at ensiling were $2.84 \log_{10}$ most probable number (MPN)/g, with no differences between treatments or farms. Nitrate was below the detection limit on farm 1 and exceeded 2,300 mg/kg of fresh matter on farm 2. At unloading, the BAB spores in the ST silage on farm 1 were greater than $5 \log_{10}$ MPN/g, whereas in the CORE and the OB silages, they were approximately $2 \log_{10}$ MPN/g. The ST silage had the greatest pH (5.89), the greatest mold count ($5.07 \log_{10}$ cfu/g), and the greatest difference between silage temperature and ambient temperature ($dT_{\text{section-ambient}}$). On farm 2, the ST silage had the greatest concentration of BAB spores ($2.19 \log_{10}$ MPN/g), the greatest pH (4.05), and the least nitrate concentration compared with the CORE and the OB silages. Pooled data on BAB spores collected from aerobically deteriorated samples showed a positive relationship with pH, mold count, and $dT_{\text{section-ambient}}$ and a negative relationship with nitrate concentration. A high concentration of BAB spores ($>5 \log$ MPN/g) was associated with visible spoilage, high pH values (>5.00), high mold counts ($>5 \log$ cfu/g), high $dT_{\text{section-ambient}}$, and nitrate below 1,000 mg/kg of fresh matter. **We concluded that the use of a film with reduced oxygen permeability prevented the outgrowth of BAB spores during conservation and feed-out, and it could improve the microbiological quality of corn silage by eliminating the fractions of silage with high BAB spore concentrations.**

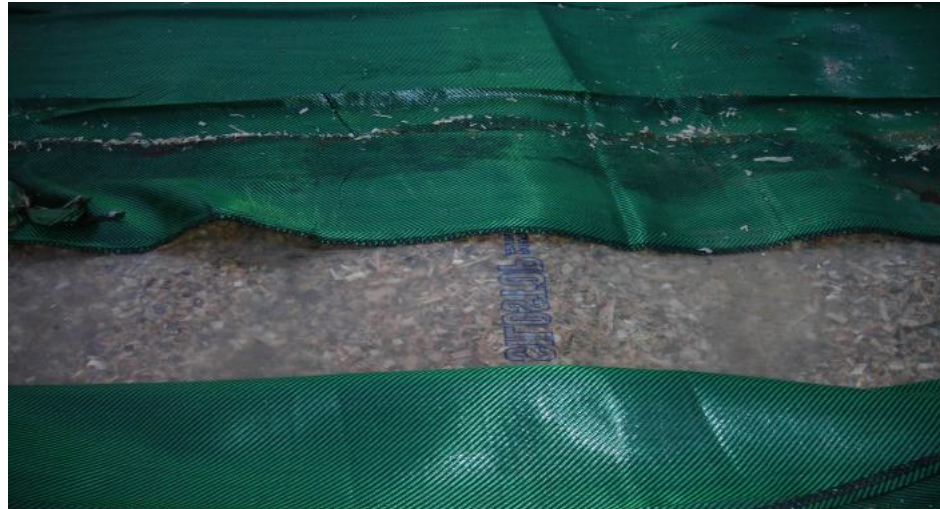
Key Words: butyric acid bacteria • corn silage • oxygen barrier film Silostop • aerobic deterioration

PROTECTION VELITEX ENSILAGE

TECHNOLOGIE ISSUE DE LA CONSERVATION DES ALIMENTS

Manuel d' utilisation

CONSERVATION ENSILAGE



MISE EN PLACE SYSTEME VELITEX ENSILAGE

25



B.R Silostop

SILOSAT





Ouvrir sans blesser le film ensilage
B.R Silostop . Ne pas utiliser d'outil
coupant à l'ouverture du rouleau



Coupure
par couteau



Placer au milieu du silo.

Le faible poids du rouleau et sa petite
taille permet de dérouler seul le
rouleau B.R Silostop

Ne jamais couper le film B.R Silostop
perpendiculairement au milieu de la
largeur.

DEROULER LE B.R Silostop



Dérouler et placer quelques boudins de lestage tous les 10 Mt autour du silo

Ajuster la position de la bâche B.R Silostop

Déplier au plus bas évitant trop de prise au vent. Placer quelques boudins de lestage.

DISPOSER LE SILOSAT ET SILOBAGS



Poser sur le silo les SILOSAT (5,2 *8 MT) et les maintenir avec les sacs à silo.

A stocker dans un endroit à l'abri de la lumière et des rongeurs.

HERMETISER LES CONTOURS DU SILO ET LES CHEVAUCEMENTS DE SILOSAT



Il est possible de marcher sur B.R. Silostop qui est très résistant.



Placer les boudins de lestage sur les chevauchements de SILOSAT.

Les contours du silo doivent être impérativement hermétiques avec les boudins de lestage.

Un silo parfaitement hermétique peut gonfler temporairement



Sous le système VELITEX ENSILAGE , procédé réellement étanche, les gaz sont emprisonnés

Ils peuvent soulever temporairement le B.R Silostop et SILOSAT.

Pendant quelques minutes, si vous le désirez , levez un boudin de lestage pour évacuer plus rapidement les gaz. Se tenir à distance des gaz qui s'échappent.

Un silo parfaitement hermétique peut gonfler temporairement



Il est important de respecter la mise en place des boudins de lestage pour obtenir un silo parfaitement hermétique.



- LES SELECTIONS OBTENUES AVEC
CE SYSTEME « Oxygen Barrier »
 - 2008 – Salon AG WORD – USA
 - BEEFEX 2008 – NZ
 - Parcours Innovation SIMA 2009
 - Prochainement inscription aux Innovations
Agritechnica (Novembre 2009)

Dairy Technology Center is home to Top-Five New Dairy products

World Ag Expo has selected the 2009 Top-Five New Dairy Products, which will be celebrated today during Media Day.

A panel of industry professionals and agriculturalists chose these products as the newest, most innovative products for the upcoming year. The selections will be on display throughout World Ag Expo in the Dairy Technology Center (DTC), presented by Bella Health Systems.

The DTC is a 140x160-foot indoor canvas-covered structure devoted to dairy exhibits. It was part of an expansion in 2008 made to satisfy the demand for more dairy exhibit space.

The Top-Five Dairy Products were introduced in 2008 at World Ag Expo.

"Dairy production leads California's



Top-Five New Products

Agrivolt Monitoring System, by
Agrivolt, Kansas City, Missouri

Calf-Tel, by Hampel Corp.,
Germantown, Wisconsin

I.D.ology, by I.D.ology, Eau Claire,
Wisconsin

Silostop, by Silostop, Clovis, Calif.

TenXsys SmartBolus® System, by
TenXsys Inc., Eagle, Idaho

agricultural market and is a strong component of the state's and nation's economy," said Paul Simon, 2009 World Ag Expo Chairman. "These Top-Five products demonstrate the leading technology helping producers make their operations more profitable and efficient."

More info at Worldagexpo.com.

BeefEx 2008 *Round Up*

This year's BeefEx was EXCELLENT!

As you can see by these photographs we had a great time socially, and when it was time to get down to business, the information on offer was extremely worthwhile.

We've received great feedback about the quality of our stand as we shared information about silage with those who visited – our goal is always to provide resources which will enhance your business.



*Sandy Maconochie, David Maconochie, Ken Rich, Andrew McDonald & Julian Smith.
Winners are grinners - Ken Rich presents trophies to the winning team in the Ambrose Golf Tournament.*

Silostop System Launched



With the UK's Dr. Mike Wilkinson providing assistance, we launched the Silostop system at this year's BeefEx and we were very proud when Silostop was chosen as one of three finalists in the Innovation Awards hosted by IAP's John Doyle.

Mike has a list of experiences and credentials in silage that's as long as your arm and having him on hand to answer questions and discuss his first hand knowledge of the new Silostop silage covering system was a great benefit.

Mike Wilkinson has written 15 books on silage including a major review of silage making in 40 different countries. He has more than 40 years experience in grass and forage crop research and management and more than 10 years practical experience of beef production and retailing. Mike is a Special Lecturer at Nottingham University, UK and also works as a consultant to the international livestock industry. He was keynote speaker at the first Australian Maize Conference and has worked with Australian livestock researchers and consultants for many years.

In the Swing

VELITEX

Hall 2 Allée J Stand 34

Silostop est une bâche à ensilage de 45 μm , 28 fois moins poreuse à l'oxygène qu'une bâche standard de 150 μm . Elle assure ainsi moins de moisissures et de pertes de matière sèche.

VELITEX

Silostop is a 45 μm thick silage cover, which is 28 times less porous to oxygen than a 150 μm standard cover. It assures less moulds and less dry matter losses.



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